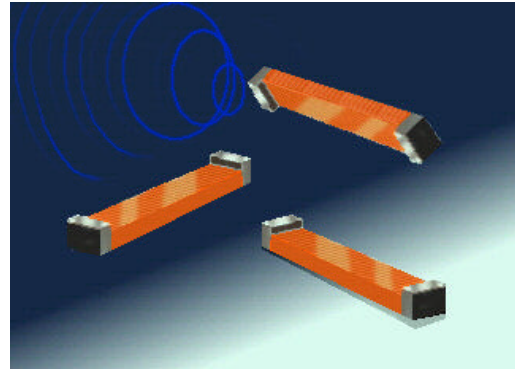


# ECM Chip Transponder Inductors

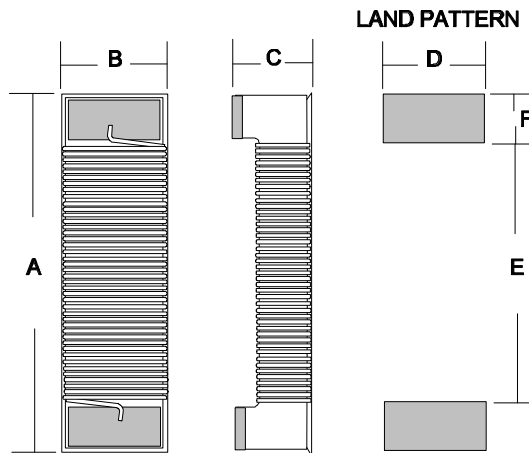
## TR Series

- High Shock Resistance
- High Temperature Tolerance
- Ferrite Core
- 2 Standard Sizes
- Taped and Reeled
- Typical Reel Size 3000pcs



The TR series of surface mountable wound inductors was the very first of its type specifically designed for transponder applications. Continuous product developments mean the TR range continues to be the most effective antenna coil available for a wide choice of applications. Its length and cross sectional area is optimised to achieve maximum sensitivity on the coils axis. For designs such as industrial and automotive applications, that need to withstand high shock and vibration characteristics (Higher than 1.0m drop test), high shock versions are also available.

### COMPONENT OUTLINE



### DIMENSIONS (mm)

ECM Type	Inductance Range	A	B	C	D	E	F
TR1102	290uH~16.2mH	11.0	2.2	2.3	2.8	9.2	1.0
TR1504	410uH~4.91mH	15.0	4.3	2.3	4.8	13.0	1.0

ECM Electronics Limited, Penmaen House, Ashington, West Sussex, RH20 3JR, UK  
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Although we have attempted to accurately reflect the products we market. ECM reserve the right without prior notice to discontinue any product or make design changes we believe necessary.

# ECM Chip Transponder Inductors

ECM Part	L (mH)	Tol %	C (pF)	Q Min. (**kHz)	SRF Min. (kHz)	Reading Distance (cm) <sup>RD</sup>
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## TR1102 Series

TR1102T-291	0.29 @ 125 kHz	K	5600	20	1000	29
TR1102T-341	0.34 @ 125 kHz	K	4700	20	1000	34
TR1102T-411	0.41 @ 125 kHz	K	3900	20	1000	38
TR1102T-491	0.49 @ 125 kHz	K	3300	20	1000	39
TR1102T-601	0.60 @ 125 kHz	K	2700	20	1000	41
TR1102T-731	0.73 @ 125 kHz	J	2200	20	1000	42
TR1102T-901	0.90 @ 125 kHz	J	1800	20	1000	43
TR1102T-102	1.08 @ 125 kHz	J	1500	20	1000	45
TR1102T-162	1.62 @ 125 kHz	J	1000	20	600	52
TR1102T-192	1.97 @ 125 kHz	J	820	20	400	59
TR1102T-242	2.38 @ 125 kHz	J	680	22	400	65
TR1102T-292	2.89 @ 125 kHz	J	560	25	400	68
TR1102T-342	3.44 @ 125 kHz	J	470	25	400	71
TR1102T-402	4.05 @ 125 kHz	J	400	25	350	74
TR1102T-492	4.91 @ 125 kHz	J	330	25	350	75
TR1102T-602	6.00 @ 125 kHz	J	270	25	350	75
TR1102T-722	7.20 @ 125 kHz	J	225	25	330	70
TR1102T-742	7.36 @ 125 kHz	J	220	25	300	63
TR1102T-902	9.00 @ 125 kHz	J	180	22	300	61
TR1102T-113	10.8 @ 125 kHz	J	150	20	300	54
TR1102T-143	13.5 @ 125 kHz	J	120	20	250	47
TR1102T-163	16.2 @ 125 kHz	J	100	20	250	45

## TR1504 Series

TR1504T-411	0.41 @ 125 kHz	J	3900	20	1000	61
TR1504T-491	0.49 @ 125 kHz	J	3300	20	1000	65
TR1504T-601	0.60 @ 125 kHz	J	2700	20	1000	74
TR1504T-731	0.73 @ 125 kHz	J	2200	20	1000	75
TR1504T-901	0.90 @ 125 kHz	J	1800	20	1000	78
TR1504T-102	1.08 @ 125 kHz	J	1500	20	1000	80
TR1504T-162	1.62 @ 125 kHz	J	1000	20	800	78
TR1504T-192	1.97 @ 125 kHz	J	820	20	600	75
TR1504T-242	2.38 @ 125 kHz	J	680	22	400	75
TR1504T-292	2.89 @ 125 kHz	J	560	25	400	71
TR1504T-342	3.44 @ 125 kHz	J	470	25	400	68
TR1504T-412	4.15 @ 125 kHz	J	390	25	350	66
TR1504T-492	4.91 @ 125 kHz	J	330	25	350	65

TOLERANCES J=5%; K= 10%.

\*\* = Operating and Test Frequency as specified in 'L' column

C = Capacitor for tuning circuits (125kHz) NB - the parallel input Cap. of the IC must also be taken into account

<sup>RD</sup> = 20mVp/p in a tuned circuit – Emitter Ø 194mm, L @ 734 µH, Vrms 73.3mV

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